Remarks

Claims 1-25 and 27-40 were pending in the present application prior to the present Amendment, and claims 1-25 and 27-40 were rejected. Claims 9, 10, 18 and 20 have been canceled herein, and claims 1, 4, 11, and 27 have been amended. In addition, new claim 41 has been added. Claims 1-8, 11-17, 19, 21-25, and 27-41 are therefore currently pending in the present application.

Support for the amendment of claim 1 can be found in the specification on page 8, lines 14-26 and in canceled claims 9 and 10. No new matter has thus been added by this amendment. The remaining amendments made to claims 4, 11, and 27 correct minor informalities. In view of the foregoing, the Applicants respectfully request entry of this Amendment and consideration of the present application as amended herein.

Request to Correct Inventorship

The Office Action dated June 19, 2006 indicated that the Request to Correct Inventorship filed by the Applicants on April 24, 2006 was deficient because the declaration submitted with that Request did not list all of the actual inventors. The Applicants are therefore submitting herewith a Declaration which lists and has been signed by all of the inventors. The Applicants therefore respectfully request reconsideration of the Request to Correct Inventorship in view of the submission of this Declaration.

Objection to Claims 18 and 20

Claims 18 and 20, which depend from claim 17, were objected to as containing limitations that are duplicative of limitations found in claim 17. In view of this, claims 18 and 20 have been canceled. The Applicants therefore respectfully request that this objection to the present application be withdrawn.

Rejections under 35 U.S.C. § 102(e)

Claims 27, 29-33, and 39-40 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,391,298 to Pieper et al. Independent claim 27 recites an apparatus comprising "a container having ... a bottom ... the bottom having an inner wall which is substantially flat with the exit being substantially centrally located in the bottom." In the assembly of the Pieper patent, by contrast, the housing (18) comprises a conical bottom, as can be seen in Figures 2 and 3. The housing of the Pieper patent therefore does not confer the advantages which have been found by the Applicants when an apparatus having a substantially flat bottom and a centrally located exit is used. These advantages are described in the specification of the present application on page 8, lines 29-37, as follows:

"The flow pattern, as a result of the flat inner surface 50 and its centrally located exit 51, is axially located through the extraction layer 14 without channeling, i.e., substantially the entire microparticulate layer is used for extraction. This results in homogenous absorption of compounds of interest in the extraction layer 14, and efficient transmission of liquid through the system with minimum entrapment of liquid."

Included in the assembly of the Pieper patent is a disk support plate (38), which is placed over the bottom of the housing. This support plate, however, comprises a grooved surface and a plurality of peripherally located exit holes (as described at column 5, lines 32-43 of the Pieper patent), and thus fails to suggest the configuration of the container of the presently claimed apparatus.

The Pieper patent therefore fails to disclose or suggest a container having a bottom with a substantially flat inner wall and a centrally located fluid exit, as recited in independent claim 27. It also does not suggest that such an arrangement would result in efficient fluid transmission or in the homogenous absorption of compounds of interest in an extraction layer. In view of this, claim 27 is neither anticipated nor made obvious by the Pieper patent.

Claims 29-33 and 39-40 depend either directly or indirectly from claim 27, and therefore are also patentable for the foregoing reasons. The Applicants therefore

respectfully request that the rejections of claims 27, 29-33, and 39-40 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,391,298 to Pieper be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 1-5, 9-11, 21, and 24-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,774,058 to Mehl in view of U.S. Patent No. 5,279,742 to Markell. The Mehl patent discloses a fluid filter (10) having a filter disc (18) at its lower end. As best seen in the cross-sectional view of Figures 2 and 9, the filter disclosed by Mehl does not include a substantially flat bottom wall having a substantially centrally located exit, as recited in independent claim 1. Instead, the filter of Mehl comprises a side wall (i.e., support member 12) which ends at a lower opening (16).

As stated above, the use of a flat bottom wall having a centrally located exit confers advantages to the present apparatus, including efficient fluid transmission and the homogenous absorption of compounds of interest in extraction media. The Mehl patent does not teach or suggest the use of a substantially flat bottom wall having a substantially centrally located exit, and does not suggest that such a construction would confer the advantages found by the Applicants. In view of this, claim 1 is not obvious over the Mehl patent.

The Markell patent, which discloses an extraction media disk, does not supply the deficiency noted above with respect to the Mehl patent. Therefore, a combination of the Mehl and Markell patents does not make the presently claimed invention obvious.

Claims 2-5, 9-11, 21, and 25 depend either directly or indirectly from claim 1, and therefore are also believed to be patentable for the foregoing reasons. With regard to claim 24, this claim depends from independent claim 17, which has not been rejected under 35 U.S.C. § 103(a). Therefore, this claim is believed to be nonobyious as well.

In view of the foregoing, the Applicants respectfully request that the rejections of claims 1-5, 9-11, 21, and 24-25 under 35 U.S.C. § 103(a) be withdrawn.

Nonstatutory Obviousness-Type Double Patenting Rejections

Claims 1-8, 11-13, 21-22, and 25 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-7, 9, 10, 12, and 14 of U.S. Patent No. 5,595,653 to Good. Claims 9, 10, 14-20, 23-24, and 27-40 were also rejected on the ground of nonstatutory obviousness-type double patenting, as being unpatentable over claims 1, 4-7, 10, 12, 14, 15, and 17-19 of U.S. Patent No. 5,595,653 to Good in view of U.S. Patent No. 5,391,298 to Pieper.

The Applicants are submitting herewith a terminal disclaimer of the portion of the term of the present application which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 5,595,653. In view of such submission, the Applicants respectfully request that the rejection of claims 1-25 and 27-40 on the ground of nonstatutory obviousness-type double patenting be withdrawn.

Conclusion

The Applicant believes that all pending claims, claims 1-8, 11-17, 19, 21-25, and 27-41, are in condition for allowance, and a Notice of Allowance is respectfully requested. If, however, there remain any issues which can be addressed by telephone, the Examiner is encouraged to contact the undersigned at the telephone number listed below.

Please charge any fees due in connection with this Amendment or credit any overpayment to Deposit Account No. 19-2090.

Respectfully submitted,

SHELDON & MAK PC

Reg. No. 36,799

Date: October 19, 2006 By: /michael fedrick/
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